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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/508,983	04/13/2005	Wilfried Borgmann	2001B133	1146

23455 7590 07/20/2010
EXXONMOBIL CHEMICAL COMPANY
5200 BAYWAY DRIVE
P.O. BOX 2149
BAYTOWN, TX 77522-2149

EXAMINER	
BULLOCK, IN SUK C	

ART UNIT	PAPER NUMBER
1797	

MAIL DATE	DELIVERY MODE
07/20/2010	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/508,983	BORGMANN ET AL.	
	Examiner	Art Unit	
	IN SUK BULLOCK	1797	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04 June 2010*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *7-15* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *7-15* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *04 June 2010* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

Amendment to claim 7 is acknowledged.

No claim has been canceled and no new claim has been added. Thus, claims 7-15 remain pending in this current application.

Objection to drawing is withdrawn in view of a new drawing submitted.

Maintained Rejection

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein

were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 7-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,303,841 to Senetar et al. (hereinafter "Senetar").

Senetar discloses a process for producing olefins from the effluent of an oxygenate conversion process (col. 1, lines 4-8). The process comprises contacting methanol with a molecular sieve catalyst to produce an effluent stream comprising light olefins, oxygenates, and C4+ hydrocarbons (col. 5, lines 15-30 and col. 7, line 44 to col. 8, line 16). The effluent stream is passed to a compression zone to remove water and methanol, the compressed effluent stream is then sent to an oxygenate removal zone (comprising methanol wash followed by water wash) to removes oxygenates, and the oxygenate removal zone effluent is sent to several separation stages including a drying zone (see Figure 2 and accompanying description in col. 13, line 62 to col. 15, line 10).

Senetar fails to disclose the amount of methanol used in the methanol wash.

Senetar discloses that the oxygenate removal zone comprises the use of conventional water washing and methanol washing steps well known to those skilled in the art. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to have determined an effective amount of methanol required for the washing absent any showing of unexpected results.

Senetar, also, fails to disclose the gas superficial velocity as recited in claim 13.

It would have been obvious to one skilled in the art to have determined the optimum gas superficial velocity since it is a result-effective variable. Determination of optimum values of cause effective variables has been held to be within the skill of one practicing in the art. *In re Boesch*, 205 USPQ 215 (CCPA 1980).

With regard to the methanol conversion rate, since the process of Senetar is similar to the claimed process, the process of Senetar would have resulted in the conversion of methanol in the range as claimed.

Response to Arguments

Applicants' arguments filed 6/4/2010have been fully considered but they are not persuasive.

The argument that "certain process steps have been modified by the transitional phrase 'consisting essentially of'" (Remarks, page 4, 3rd paragraph) is not persuasive because absent a clear indication in the specification or claims of what the basic and novel characteristics actually are, "consisting essentially of" will be construed as equivalent to comprising" (MPEP 2111.013). Applicants' method of removing oxygenates from the olefin stream includes methanol washing and water washing steps. These steps are the same as Senetar's method of removing DME and unreacted oxygenate (see Figure 2, reference #120 - oxygenate removal unit, and col. 8, lines 16-22).

With regard to Applicants' argument directed to removal of CO_2 by absorption (Remarks, page 4, 4th paragraph through page 5, 1st full paragraph), the argument is not persuasive because Senetar is not removing oxygenates by absorption but rather by methanol washing and water washing steps as claimed instantly. Applicants' claims do not exclude the removal of CO_2 as disclosed by Senetar. Applicants have the burden of showing that the introduction of this additional step to the claimed process step would materially change the characteristics of Applicants' instant invention. *In re De Lajarte*, 143 USPQ 256 (CCPA 1964).

In view of the foregoing, the claims are obvious over Senetar.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to IN SUK BULLOCK whose telephone number is (571)272-5954. The examiner can normally be reached on Monday - Friday 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on 571-272-1444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/In Suk Bullock/
Primary Examiner, Art Unit 1797